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A.D. 1887, 17th SEPTEMBER. N° 12,625.  
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PROVISIONAL SPECIFICATION.

Improvements in the Construction of Artificial Feet.

I, LORENTZ ALBERT GROTH, of 5 Crosby Hall Chambers, in the City of London, Civil Engineer, as a communication from abroad by Jacob Rosenfelder of No. 7 Mondschein gasse, in the City of Nuremberg, in the Kingdom of Bavaria, German Empire, Mechanical Engineer, do hereby declare the nature of this invention to be as follows :—

The object of this Invention is to construct artificial feet in such way that their weight is reduced to a minimum.

The upper part of the arrangement, for fastening the artificial foot to the leg, is made from thin padded blades of steel or iron, the tops of which are fastened to an elastic belt. The foot, made from hollow wood, is fastened to the elastic belt by means of five steel blades, the lower ends of the two utter ones being fastened together by means of a bolt. A steel-blade, with its ends bent upwards, is fastened to the two utter blades and to the middle one by means of screws passing through the ends, and to the second and fourth blades by means of small pieces. These second and fourth blades are fastened to the foot by means of a bolt passing from the second blade through the foot into the fourth blade, these two blades forming the two sides of the foot. By this arrangement a complete and moveable connection between the leg and foot is obtained, and in the same time all side movements avoided.

Two springs are placed in recesses in the back and front part of the foot, the upper ends of said springs resting against the before mentioned steel-blade, and kept in their positions by means of pins.

The upper part of the legging can be opened in order to admit the limb, and is fastened round the leg by means of belts.

Dated this 16th day of September 1887.

LORENTZ ALBERT GROTH.

COMPLETE SPECIFICATION.

Improvements in the Construction of Artificial Feet.

I LORENTZ ALBERT GROTH, of No. 3 Tokenhouse Buildings, in the City of London, Civil Engineer, as a communication from abroad by Jacob Rosenfelder, of No. 7 Mondschein gasse, in the City of Nuremberg, in the Kingdom of Bavaria, German Empire, Mechanical Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement reference, being made to the drawings accompanying, in which Fig. 1 represent a side view and Fig. 2 a back view of the construction ; Fig. 3 shewing the arrangement laid open :—

The object of this Invention is to construct artificial feet in such way, that their weight is reduced to a minimum. The upper part of the arrangement for fastening the artificial foot to the leg, is made from thin padded blades *b*, of steel or iron, the tops of which are fastened to an elastic belt *a*. The foot, made from hollow wood, is fastened to the elastic belt by means of five steel blades, *c*, *g*, *d*, *h*, *c*, the lower ends of the two outer ones, *c*, *c*, being fastened together by means of a bolt. A steel blade *e*, with its ends, *f*, bent upwards, is fastened to the two outer blades, *c*, *c*, and to the middle one, *d*, by means of screws, passing through the ends and to the second and fourth blades, *g*, *h*, by means of small pieces *i*, *i*. These second and fourth blades *g*, *h*, are fastened to the foot by means of a bolt *k*, passing from the second blade, *g*, through the foot into the fourth blade *h*, these two blades forming the two sides of the foot.

If necessary the artificial foot can also be fastened to the thigh by means of steel blades *o*.

By this arrangement a complete and moveable connection between the leg and foot is obtained, and in the same time all side movements avoided. Two springs *l* are placed in recesses in the back and front part of the foot, the upper ends of said springs resting against the before mentioned steel blade and kept in their positions by means of pins *m*. The upper part of the legging can be opened in order to admit the limb, and is fastened round the leg by means of belts *n*.

Having now particularly described and ascertained the nature of my said Invention, and in what manner the same is to be performed, I declare, what I claim is :

The construction of an artificial foot, fastened to the leg by means of steel blades, the top ends of which are fastened to an elastic band, and their lower ends connected by means of a steel band, the foot itself being connected with the second and fourth blades by means of a bolt, the foot being provided with two springs, principally as herein described.

Dated this 17th September 1887.

LORENTZ ALBERT GROTH.

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1888.



[This Drawing is a reproduction of the Original on a reduced scale.]



